IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

		Atty. Docket: HOFFMAN9
In re Application of:	)	Conf. No.: 2518
Arnold HOFFMAN et al.	)	Art Unit: 1614
Appln. No.: 10/626,326	)	Examiner: J. D. Anderson
Filed: June 18, 2003	)	Washington, D.C.
For: REDDOX THERAPY FOR TUMORS	)	

DECLARATION UNDER 37 CFR §1.132

Honorable Commissioner for Patents
U.S. Patent and Trademark Office
Customer Service Window
Randolph Building, Mail Stop **Amendment**
401 Dulany Street
Alexandria, VA 22314

Sir:

I, Arnold Hoffman, hereby declare and state as follows:

I am the same Arnold Hoffman named as an inventor in the above-identified application and my educational and professional experience is presented in the curriculum vitae attached hereto.

The experiments described below were designed by me and either conducted by me or under my supervision, and I can attest of my own personal knowledge that all the results reported herein are true and accurate.

Bladder tumors that were induced subcutaneously in mouse were treated with a combination of four compounds/agents

(0.05 ml of combined 10^{-2}M DSF and 10^{-3}M BSO dissolved in water and 0.05 ml of combined 10^{-4} Curcumin and 10^{-6}M carmustine dissolved in DMSO) by direct injection into the tumors. The control tumor was untreated and the "solvent" control tumor was treated by injection with only 0.05 ml water and 0.05 ml DMSO.

Figures 1 and 2 show, respectively, photographs of the tumors and a plot of the average tumor volume versus time for the mouse bladder tumors treated or untreated with the combination of four compounds/agents. Figure 1 also shows the solvent treated tumor.

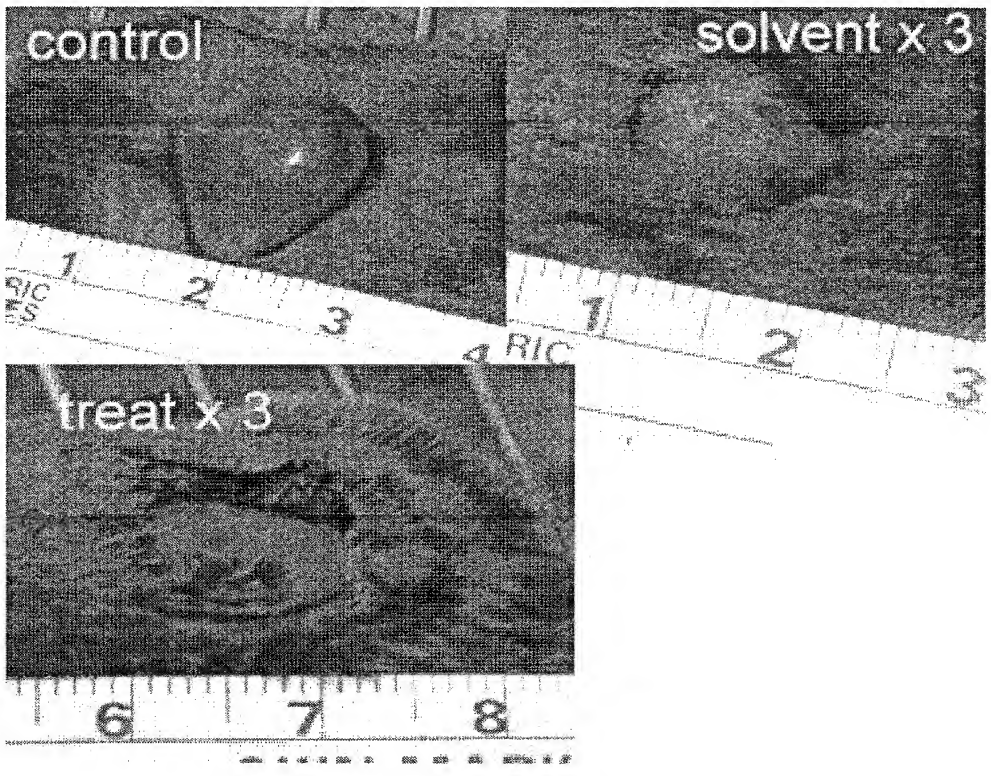

Fig. 1

As shown in Fig. 1, the tumor that was treated has disappeared. Two out of three such treated tumors disappeared in this experiment. The third regressed significantly. Fig. 2 shows a dramatic reduction in the average tumor volume three days after injection of tumors with the 4 compounds/agents.

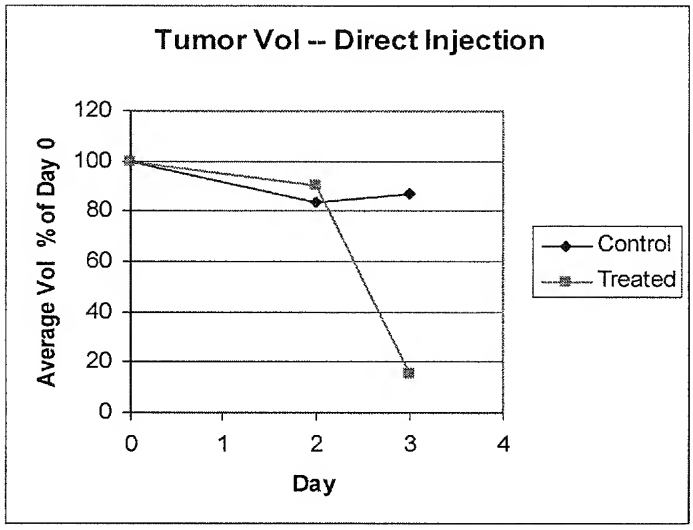

Fig. 2

Note that nothing was left of the treated tumor in Fig. 1 but a lesion. The lesion is clean and unhealed, which further validates the theory upon which the model is based, that the therapeutic compounds and the manner in which they were dosed and applied prevented all cells - normal and cancerous - from proliferating. Normal cells can, when prevented from proliferating, seek refuge in the G_0. Cancerous cells, on the other hand have no G_0 stage and instead become trapped in G_{1pm} and, after the apoptotic default time, undergo apoptosis. Until the therapeutic compounds have been dissipated, the normal cells

cannot proliferate and hence the wound shown in Fig. 1 will not heal. After the compounds have been dissipated, however, the wound is expected to heal in a normal fashion.

The undersigned declares further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Nov 1, 07
Date

Arnold HOFFMAN

G:\BN\B\BENA\HOFFMAN9\PTO\2007-10-31Declaration132(Hoffman).doc

CURRICULUM VITAE

Name: ARNOLD HOFFMAN
Address: Hagra 5, Rehovot 76310, Israel Birthplace: Brooklyn, N.Y.

Email: arniehoffman@hotmail.com Tel: 972-8-947-1648

EDUCATION

B.A. Chemistry, Yeshiva University, New York, 1956
B.Ch. E. Chemical Engineering City College of N.Y., 1958
Ph.D. Physical Chemistry Polytechnic Institute of Brooklyn, N.Y., 1966

EXPERIENCE

1997- present	Biology Research
1993-1997	Private Consultant, Israel Ministry of Defense, Scitex Corp. – Photographic and Imaging areas, Cellect- Biology, Tadiran- Batteries
1981-1993	Founder and Manager – Hanetz Photographic Processes Ltd. Israel Developed a screenless halftone system for printing
1978-1981	Visiting Professor, Weizman Institute of Science, Rehovot, Israel. Taught a graduate course on the Theory of the Photographic Process. Wrote a book on same. Consultant to Tadiran Batteries
1966-1978	Polaroid Corp. Cambridge, MA, USA. Worked in Photographic and Imaging Science. Invented the Polaroid Battery pack.
1960-1964	Leesona-Moos Research Labs, NY, USA. Worked on Hydrogen/Oxygen Fuel Cell for the Apollo Program.

INVITED TALKS

1973	Soc. Phot. Sci & Eng. Seminar on Theories of Development, Annual Meeting, Rochester, NY., USA
1979	Growth and Properties of Metal Clusters Applications to Catalysis and the Photographic Process", Villeurbanne, France

SELECTED PUBLICATIONS in ELECTROCHEMISTRY, including the following ELECTROCHEMICAL MODELS:

1. Latent Image- *Thermodynamic theory of latent image formation* London: Focal/Butterworths Press, 1982
2. Photosynthesis – (with E. Tepper) *Energy Storage in Photosynthetic Phosphorylation: Lessons from the Physical Chemistry of the Photographic latent Image.* Journal of Theoretical Biology 103 (1983)
3. Cell Cycle - a paper, *Redox Model of Cell Proliferation.* Journal of Theoretical Biology 211 (2001), 403-40; with L. Spetner and M. Burke

PATENTS in

1. Imaging
2. Photographic Processes
3. Batteries